UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,975	10/25/2005	Richard Schneider	01309.0008.PCUS00	7986
<sup>32894</sup> HOWREY LLF	7590 12/15/200 P-EU	EXAMINER		
	ETING DEPARTMEN W PARK DR., SUITE	TRAN, DALENA		
FALLS CHUR		ART UNIT	PAPER NUMBER	
			3664	
			MAIL DATE	DELIVERY MODE
			12/15/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	ation No. Applicant(s)				
	10/526,975	SCHNEIDER ET AL.				
Office Action Summary	Examiner	Art Unit				
	Dalena Tran	3664				
The MAILING DATE of this communication a Period for Reply	appears on the cover sheet w	th the correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
Responsive to communication(s) filed on 21     This action is <b>FINAL</b> . 2b) ☐ TH     Since this application is in condition for allow closed in accordance with the practice unde	his action is non-final. vance except for formal matt	• •	ts is			
Disposition of Claims						
4) ☐ Claim(s) 1-14 is/are pending in the application 4a) Of the above claim(s) is/are withd 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-14 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and Application Papers 9) ☐ The specification is objected to by the Exami	rawn from consideration.					
10) The drawing(s) filed on is/are: a) a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct and the	ccepted or b) objected to ne drawing(s) be held in abeyar ection is required if the drawing	ice. See 37 CFR 1.85(a). (s) is objected to. See 37 CFR 1.1				
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	Paper No(s	Summary (PTO-413) s)/Mail Date nformal Patent Application 				



# **UNITED STATES DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office**

DATE MAILED:

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ļ ,	ATTORNEY DOCKET NO.
10526975	10/25/05	SCHNEIDER ET AL.		01309.0008.PCUS00
		EXAMINER		
HOWREY LLP-EU C/O IP DOCKETING D		Dalena Tran		
2941 FAIRVIEW PARK DR., SUITE 200 FALLS CHURCH, VA 22042			ART UNIT	PAPER
			3664	20091211

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner for Patents** 

Application/Control Number: 10/526,975 Page 2

Art Unit: 3664

### **DETAILED ACTION**

## **Notice to Applicant(s)**

1. This office action is responsive to the amendment filed on 9/21/09. Claims 1-14 are pending.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1-14, are rejected under 35 U.S.C. 102(b) as being anticipated by DE 10062606 (refers as '606).

As per claim 1, ('606) discloses a method for monitoring the state of a vehicle chassis, the method comprising: measuring physical variables on the chassis by means of sensors (see [0003-0005]), providing a model of the vehicle which continuously identifies parameters of the vehicle and uses such parameters to continuously compile modeled variables in a simulatory prognosis of the vehicle behavior (see [0008-0010], and [0025-0028]); comparing the measured variables with the modeled variables by means of a processing unit, wherein the modeled variables are determined from specific variable (see [0023-0024]), performing a classification into classes of causes on the basis of the comparison and evaluating is a result of the classification (see [0029-0034]).

As per claims 2-3, ('606) discloses speeds, acceleration, or forces are measured as physical variables, and determining or updating a remaining lifetime of vehicle components

Application/Control Number: 10/526,975

Art Unit: 3664

before a critical state is reached or before a maintenance measure is needed, using at least one damage evolution or ageing model of the vehicle components (see [0011-0014], and [0036-0038]).

As per claim 4, ('606) discloses the comparison of the measured variables and the modeled variables is made by means of a correlation (see [0036-0038]).

As per claims 5-7, ('606) discloses the classification is performed by means of the processing unit, and the classification is made as to whether a cause inside the vehicle or an external cause is involved (see [0029-0034]).

As per claim 8, ('606) discloses the modeled variables are calculated (see [0025-0028]).

As per claim 9, ('606) discloses a device for monitoring the state of a vehicle chassis, in comprising: one or more sensors for measuring physical variables on the chassis (see [0003-0005]); a processing unit for calculating modeled variables, by continuously identifying vehicle parameters and continuously compiling a simulatory prognosis of the chassis behavior using a model of the chassis (see [0008-0010], and [0025-0028]); for comparing the measured variables with the modeled variables (see [0023-0024]), and for classifying as a result of the comparison; and means for evaluating the classified results (see [0029-0034]).

As per claim 10, ('606) discloses the processing unit comprises: at least one damage evolution or ageing model of chassis components which is used to determine or update a remaining lifetime before a critical state is reached or before a maintenance measure is required (see [0029-0034).

As per claim 11, ('606) discloses an interface to a superordinate control system of the vehicle is connected to the processing unit, via which data on an actual driving state is delivered

Art Unit: 3664

to the processing unit or messages therefrom may be saved and may be transmitted to a driver or traction unit conductor or an external control centre (see [0025-0028])

As per claim 12, ('606) discloses at least one sensor is a vibration sensor, an acceleration sensor, an impact sensor, an acoustic sensor, a sound sensor, an eddy current sensor, a magnetic field sensor, a temperature sensor, a force sensor, an strain sensor, a distance sensor, a radar Doppler sensor or an ultrasound sensor (see [0003-0005]).

As per claim 13, ('606) discloses at least one sensor is arranged on a component selected from the group consisting of: on a wheelset, a wheelset axle, wheelset bearing, on a bogie, a chassis frame, on a primary spring suspension, a spring, a shock absorber, a wheelset guide, a secondary spring suspension, a stabilizer, a stop buffer, a traction linkage, on a drive, a drive motor, a gear, a clutch, a drive suspension, a brake, a brake disk, a brake cylinder, a brake lining, a brake pad, a brake linkage, and a brake caliper (see [0035]).

As per claim 14, ('606) discloses the means for evaluation comprise a signaling device inside the vehicle or a signaling device in a mobile or stationary control centre outside the vehicle including a data transmission device from the vehicle to the control centre (see [0038]).

#### Remarks

4. Applicant's response t filed on 9/21/09 has been fully considered.

In reviewing the reference cited, DE 10062606 (refers as '606) reads the claimed invention under 35 U.S.C. 102(b) as above, because the publication date (6/13/02) of ('606) more than one year prior to the filing date (09/05/2003) of applicant's invention.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalena Tran whose telephone number is 571-272-6968. The

Application/Control Number: 10/526,975 Page 5

Art Unit: 3664

examiner can normally be reached on M-W (in a first week of a bi-week), and T-R (in a second week of bi-week) from 7:00AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Khoi H. Tran can be reached on 571-272-6919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.